

Docket No. **VOC101US**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re **PATENT** application of:

Applicant: Donald Paul Archiabile

Application No.: 10/685,074

For: PVLAN

Filing Date: October 14, 2003

Examiner: Quochien B. Vuong

Art Unit: 2618

REPLY BRIEF

Mail Stop Appeal Brief-Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 C.F.R. § 41.41, this Reply Brief is respectfully submitted in response to Examiner's Answer filed on August 18, 2011 in the appeal of the above-referenced matter.

REMARKS

The patent application in the above-referenced matter was filed on October 14, 2003. Several rounds of prosecution ended with the Final Office Action of October 05, 2010. A Notice of Appeal was filed on March 07, 2011, followed by an Appeal Brief filed on May 26, 2011 and an Examiner's Answer filed on August 18, 2011.

Pursuant to 37 C.F.R. § 41.41, the present Reply Brief is submitted in response to the Examiner's Answer. This Reply Brief is limited to three comments in the Examiner's Answer that compel response.

First, pages 15-16 of the Examiner's Answer set forth the rationale for applying Novakov and Hightower to reject the presently appealed claims. This rationale, which is consistent with the rationale applied by the Examiner throughout prosecution, reads in relevant portion (emphasis added):

Novakov discloses transmitting an outbound information signal at a predetermined power and a predetermined frequency (using Bluetooth transceiver) that creates a transmission zone (column 3, lines 66 – column 4, lines 46) with an adjustable range between 10 cm – 100 m (column 5, lines 32-44). And Hightower et al. disclose the transmission range can be adjusted and contained in a certain space or shape including surfaces such as door [sic], walls, floor, and ceiling (column 12, lines 54 – column 13, line 62) to reduce electromagnetic interference, secure communications, and to customize communications between the respective bounded office space (column 12, lines 54-65). Since claims 1, 33, 37 and 45 do not recite the transmission zone exclusively ranged on the surface. And claim 6 further recites "...transmission zone being substantially spherical" which clearly define the transmission zone as a volume space, not just only on a surface. Therefore, the combination of Hightower and Novakov reads on the claimed limitation of claims 1, 33, 37 and 45.

However, in attempting to stretch the teachings of the references to cover the claimed subject matter, this rationale distorts the teachings of both references with respect to the surfaces relating to the shape of the wireless network. In truth, Hightower and Novakov together entirely fail to teach anything about the concept of restricting the range of a wireless network proximate to a surface, nor any system for doing so.

Hightower presents some techniques for limiting the range of the wireless network to a particular volume of space. Hightower teaches at least one motivation for doing so (*e.g.*, for “security purposes”); that this volume of space may be bounded by particular surfaces (*e.g.*, the walls of an office); and that particular materials may be used to block the transmission of the wireless network through the surface. However, none of these teachings relate in any way to how far away from the surface that wireless network extends. As long as the wireless network does not pass through the bounding surfaces, Hightower suggests that the wireless network should fill the defined space, and teaches nothing about limiting the range of the wireless network away from any particular surface. Moreover, Hightower fails to teach any particular techniques for achieving the restrictive ranging with respect to any such surface.

Even more broadly, Novakov entirely fails to relate to any type of “surface.” Novakov only discusses the desired range of a wireless network as filling a particular volume of space, however that space may be conceptually defined (*e.g.*, 10 centimeters to 100 meters away from the transmitter), and irrespective of whether or not the space is bounded by any surface. That is, Novakov teaches an identical application of the range-adjusting techniques irrespective of whether or not the volume of space happens to be physically bounded (*e.g.*, the interior of a house) or physically unbounded (*e.g.*, the conceptual area comprising an outdoor garden). In essence, Novakov entirely fails to relate the range of the wireless network to any type of surface.

The upshot of the complete absence of these teachings in Hightower and Novakov is that the combined referenced fail to teach anything about confining the range of the wireless network proximate to a surface. Simply put, nothing on this topic is taught, suggested, or implied by either reference.

Moreover, if Novakov and Hightower fail to teach anything about the concept of restricting the range of a wireless network to the proximity of a surface, then it is even less feasible to stretch the systems of Novakov and Hightower as allegedly teaching systems that are particularly configured to do so. Appealed claims 1, 33, 37, and 45 do not only apply to the concept of restrictively ranging the wireless network in this manner, but present specific systems that achieve this result (*e.g.*, the configuration of the powered element). As one such example, the powered element may comprise a planar antenna that generates a substantially planar (*i.e.*, distinctly non-spherical) wireless network that conforms to the planar shape of a surface. The sole teaching in Hightower and Novakov about the configuration of the powered element is that the power applied thereto may be adjusted in order to fill the desired volume of space (entirely irrespective of any surfaces related thereto). The extrapolation of these references as allegedly teaching the configuration of a powered element, to achieve a result that Hightower and Novakov entirely fail to teach or imply, is therefore untenable.

Second, page 16 of the Examiner's Answer notes that "claims 1, 33, 37 and 45 do not recite the transmission zone exclusively ranged on the surface" (emphasis added).

The applicant is puzzled as to the relevance of this observation. The claims under appeal are intended to achieve a result that is entirely not taught by the cited references. To this end, the appealed claims present systems that are specially configured to achieve this result. It is irrelevant whether such techniques are "exclusively" applied to achieve this advantage, or whether such techniques further include other features that achieve other results and/or advantages (*e.g.*, in addition to configuring the powered element to restrict the range of the wireless network proximate to a surface, also bounding the space with surfaces made of materials that block the further transmission of the wireless network). Indeed, these additional features and/or advantages may be achieved through application of the techniques of Hightower and Novakov. That is, the teachings of the other references are fully compatible with the techniques presented herein, and if combined therewith, may achieve additional advantages. Significantly, the use of such techniques does not conflict with, detract from, or render redundant the restriction of the wireless network through the configuration of the powered element, as per the techniques presented herein. The optional inclusion of such additional features is irrelevant to whether the basic techniques presented herein are novel and non-obvious in view of the cited references.

Third, at page 16, the Examiner's Answer notes that "claim 6 further recites '...transmission zone being substantially spherical,' which clearly define the transmission zone as a volume space not just only on a surface." This comment appears to deduce, from claim 6, that the transmission zone of claim 1 is selected to fill a spherical volume of space. However, this construction runs counter to the structure of the presented claims and the plain language of claim 1.

Claim 6 provides in full:

6. The system of claim 2, the molded transmission zone being substantially spherical.

This claim depends from claim 2, which provides:

2. The system of claim 1, comprising a shield configured to mold the transmission zone.

The open-ended transitional phrase "comprising" of claim 2 in order to provide an additional feature to the techniques presented in claim 1. Because the surface for which the system of claim 1 is particularly adapted may comprise various shapes and sizes, the wireless network generated by such systems (as well as by the method of claim 33, the piece of furniture of claim 37, and the system of claim 45) may have corresponding shapes and sizes, *e.g.*, a substantially planar transmission zone conforming to the shape and dimensions of a planar surface. Claim 2 provides that, in addition to the restriction of the range of the wireless network to the proximity of a surface through the configuration of the powered element, (as per claim 1), shielding may also be utilized to further mold the transmission zone; and claim 6 provides that such shielding may mold the transmission zone into a sphere. That is, in addition to restricting the range of the wireless network proximate to the surface, claims 2 and 6 provide that the boundaries of the transmission zone may be further molded through shielding into various shapes, such as a sphere. The details of this optional feature of claim 6 are independent of the interpretation of the elements of independent claims 1, 33, 37, and 45.

For at least the reasons set forth in the Appeal Brief and the responsive remarks presented herein, Appellant respectfully submits that claims 1-2, 4, 6, 8-13, 15, 17-29, 31-37, and 40-45 are allowable under 35 U.S.C. § 103(a) in view of Novakov and Hightower. Accordingly, Appellant respectfully requests reversal of the 35 U.S.C. § 103(a) rejection in view of the cited references.

Respectfully submitted,

COOPER LEGAL GROUP LLC

By /David J. Stein/
David J. Stein
Reg. No. 47,965

Cooper Legal Group, LLC
6505 Rockside Road, Suite 330
Independence, Ohio 44131
Phone: (216) 654-0090